

Freshwater Fisheries Monthly Report – June 2022

Freshwater Fisheries - Stock Assessment

Trout - Trout surveys have started in Frederick and Washington Counties. The following sites were sampled in June:

- Fishing Creek (Right Fork): 49 brook trout
- Fishing Creek (Right Fork headwaters): 43 brook trout
- Clifford Branch: 47 brook trout
- Big Hunting Creek (Elbow Pool): 47 brown trout, 4 rainbow trout
- Beaver Creek (Put and Take): 95 brown trout, 8 rainbow trout



Fishing Creek in Frederick County; brown trout from Beaver Creek, Washington County

Conowingo Reservoir - The annual electrofishing survey was completed this month. Adults and young-of-year (YOY) of both smallmouth and largemouth bass were abundant during the year's survey. Large panfish were also collected at specific sites. An incredible mayfly hatch (genus *Hexagenia*) was occurring during the last week of the survey and fish were eating well. The hatch created a unique work environment, as staff had to accept being covered by the insects while completing the survey.



Largemouth young of year collected during the Conowingo Reservoir survey.



Mayflies covering trees and staff at the Conowingo Reservoir.

Wheatley Lake- A largemouth bass population estimate at Wheatley Lake was completed and the data entered into the impoundment database. The population estimate for largemouth bass under 8 inches was 430 with a confidence interval of 305 - 649. The estimate for largemouth bass eight inches and greater was 1058 with a confidence interval of 506-2401. Catchability was much lower (~4.0 percent) for bass over 8 inches, than bass under eight inches (~12.0 percent). The survey will be repeated in 2023 due to the unexpectedly low catch rate of bass greater than eight inches relative to previous survey results.

Central region staff conducted 10 trout surveys in Carroll, Baltimore, and Harford Counties. Brook and brown trout populations were the focus of these surveys.

Central region staff conducted night surveys on two separate impoundments in the region. Initial survey results indicate Clopper Lake and Piney Run Reservoir have healthy, balanced populations of largemouth bass and panfish.

Central region staff cleared hazards (strainers) in 16 miles of the Gunpowder tailwater prior to a planned electrofishing raft survey in late June. This 16 site survey will generate brown trout relative abundance and size distribution estimates from Masemore Road downstream to Loch Raven Reservoir.

Western region I staff conducted a mark-recapture population survey on the Youghiogheny River tailwater trout fishery, downstream of the Deep Creek Lake hydro-electric facility. Using two rafts, staff electrofished the entire 4 miles of the catch and release management area in order to collect and mark trout. Using the information collected, the density of trout in that section of the river was estimated to be 439 (258-829) or 110 adult trout per mile, with multiple fish exceeding 20". These data will be used to establish management objectives for the fishery as well as put and grow stocking rates.

Western region I staff tagged trout in the catch and release Management Area between Westernport and Black Oak on the North Branch of the Potomac River. All trout collected were tagged with a passive integrated transponder (PIT) tag in order to determine the age and growth of the trout in the tailwater. This was the first year of a multi-year project where all trout that are collected will be implanted with a PIT tag. In addition to the tagging, estimates of relative abundance were collected as well as individual fish data.

Western region I staff conducted a fish kill investigation on Bradford Lake. The fish kill was minor and attributed to quickly increasing water temperatures during the spawning season when the fish were stressed.

Western region I staff continues to collect tag return data from the walleye fishery on Deep Creek Lake. To date, 58 tags have been reported and angler harvest rates are slightly above 70%.

Freshwater Fisheries - Habitat and Water Quality

Environmental Review - Provided aquatic resource information for the following environmental review projects:

Central region staff attended an Environmental Review site visit with representatives from the Maryland Forest Service, Natural Resources Conservation Service, and Trout Unlimited on Deep Run in Carroll County.

Provided Deep Creek Lake State Park (DCLSP) personnel with information and guidance on where to place new fish habitat structures in the lake this year. DCLSP staff placed brush piles and reef balls in several locations this spring.

Western region I staff biologist recorded side scan imagery from twenty Deep Creek Lake spring sampling locations. Recording will later be processed using SonarTRX software for habitat mapping.

Western region I staff places temperature loggers in the Youghiogheny and North Branch Potomac River. Twenty locations were selected for coldwater monitoring throughout the summer. Loggers will be pulled in late September.

Western region I staff biologist made a site visit to the Youghiogheny River at Sang Run to check a temperature monitoring probe that had been giving erratic temperatures during extended periods of base flows. Upon inspection everything seemed to be in place. Staff later determined that personnel responsible for the probe had fixed the probe before the site visit.

Columbia Gas of Maryland submitted two applications for the installation of utility lines in Allegany County that are to be installed with the use of hydraulic directional drilling (HDD). Comments were provided for minimal impact with strict sediment and erosion control along with reclaiming the work area to mimic pre construction conditions.

An application was reviewed for a bridge installation project at a private residence in Garrett County. The bridge is to span Ginseng Run for the landowner to have access to the other side of their property located across the creek. Comments were provided for USE III closure, equipment and construction disturbance, concrete pouring conditions and reclamation of the site at completion.

Western region I staff biologist reviewed applications for possible mining operations in Garrett and Allegany Counties. The applications and site locations were desk top reviewed using Google Earth and ArcMap to determine proximity to coldwater resources. Comments and recommendations were made to protect resources.

An application was reviewed for a culvert replacement project on the Burkholder ATV trail located on Potomac Garrett State Forest.

Western region I staff provided comments on three potential Project Open Space property acquisitions.

Freshwater Fisheries - Stocking and Population Management

Freshwater Fisheries staff assisted with stocking 15,000 fingerling smallmouth bass into the upper Potomac River at multiple locations from Taylor's Landing downstream to Dargan. The smallmouth bass were produced from DNR's Joseph Manning Fish Hatchery. The fish, measuring 2 to 2.5 inches in size, were produced as part of the ongoing Smallmouth Bass Supplemental Stocking Project. The goal of the work is to help

increase juvenile smallmouth bass numbers in the river. Additional stockings are planned in the coming weeks.



Fingerling smallmouth bass being stocked into the upper Potomac River

Hosted the American Fisheries Society Hutton Intern for a day. She assisted Southern Region biologists with stocking 25,000 largemouth bass fingerlings in the Potomac River near Piscataway Creek.

Eastern regional staff transported and stocked bluegill - green sunfish hybrids to several ponds for youth fishing rodeos. The fish, raised at the Joseph Manning Fish Hatchery, help make memories that last a lifetime.

Broadford Lake and Piney Reservoir were stocked with tiger muskie fingerlings provided by the Joseph Manning Fish Hatchery. 664 fingerlings ranging from 3-5 inches were split between the two locations.

A total of 143 largemouth bass ranging from 6.25 to 13.5 inches were collected, tagged, and transported from Greenbrier Lake (Washington County) to Broadford Lake (Garrett County). The purpose of the effort was to remove bass from Greenbrier Lake where there is an overabundance of small bass and introduce them to Broadford Lake where bass reproduction is limited. This effort was conducted to balance the bass fisheries in both impoundments and improve fishing. Appropriate fish health testing was conducted prior to the translocation.



Largemouth bass transferred from Greenbrier Lake to Bradford Lake.

Fish Stocking Permits – Nine applications were processed this month.

Freshwater Fisheries - Outreach

Freshwater Fisheries staff participated in a public outreach program hosted by the Beaver Creek Fly Shop in Washington County. Multiple local angling and watershed groups also attended to highlight their work in the region. Freshwater Fisheries conducted a backpack electrofishing demonstration in Beaver Creek. Brown trout and other fish species in the stream were collected.

Western region I staff provided customer service information for multiple inquiries regarding:

- Provided callers with information on fishing Deep Creek Lake
- Gathered information from callers reporting tagged walleye from Deep Creek Lake
- Provided trout fishing information for the Youghiogheny River
- Directed caller to proper personnel for tree planting projects
- Provided information on Deep Creek Lake Walleye
- Provided caller with information for Program Open Space

Freshwater Fisheries - Angler Access

Western region I staff continue to mow grass and clean up trash at the Evitts Creek, Black Oak, and McCoole Fishery Management Areas.

Staff received an update on the McCoolle and Black Oak boat launch capital improvement projects. Degraded access roads to the very popular FMAs are slated to be rebuilt and improved. Work is predicted to start in the spring of 2023.

Freshwater Fisheries - Invasive Species

Staff submitted a grant proposal to the U.S. Fish and Wildlife Service to help fund fundamental science that will help prevent the spread of invasive fishes further upstream into the Susquehanna River.

Assisted with a snakehead derby at Gunpowder Falls State Park that aimed to increase awareness and provide an incentivized competition for fishing and harvesting northern snakehead.

The Conowingo Dam completed the last fish lift on 6/15, bringing the 2022 invasive species removals from the Susquehanna River to an end. Similar to last year, the number of flathead catfish caught increased drastically when water temperatures rose above 72 degrees. J.J. McDonnell, the cooperating seafood processor, was able to provide a box truck for transport several of the days, which eased the burden on staff transporting so many fish. Total invasives removed and pounds donated are being calculated, but numbers of northern snakehead and flathead catfish were lower than last year. For the first time ever, several blue catfish were collected and removed from the lifts. Eastern region and Central region staff had a fun team building exercise cleaning fish gunk out of the storage tubs and the refrigerator unit for return and storage.

Worked up 53 snakeheads under the Aquatic Nuisance Species grant which were intercepted from the Conowingo fish lift. The fish were measured, weighed, and checked for prey items in their stomachs. Eggs were saved from females to get counts per weight at a later date. Many additional snakeheads were worked up in the previous month that were also intercepted from the lift.

Central region staff tagged invasive northern snakeheads in the Bush River. The tagging work is part of a cooperative project between the department and the United States Fish and Wildlife Service. Anglers fortunate enough to catch a tagged fish must submit a photo of the dispatched fish and tag to the United States Fish and Wildlife Service at 800-448-8322 for either a \$10 or \$200 reward.



J.J McDonnell and Fisheries staff loading snakehead and flathead catfish for transport to processor.

Freshwater Fisheries - Coldwater Program

Attended the Eastern Brook Trout Joint Venture Steering Committee meeting. Participated in state and regional updates, discussed options for providing grant funding match with limited resources, and discussed the utility of thermal total maximum daily loads (TMDL).

Initiated the 2022 brook trout surveys. Efforts included quantitative surveys at traditional stations in the Savage River watershed, quantitative surveys and fin clip collection to address gaps in population genetics data, and qualitative surveys in the Casselman River watershed. Several surveys served as partial grant matches for habitat and water quality improvement projects that are supported by the department. Previously undocumented brook trout populations were observed in several tributaries of the Casselman River.

Worked with MDE's Abandoned Mines Division to develop an MOU for a collaborative effort that will design and fund AMD mitigation projects in brook trout watersheds. Successful outcomes will include improved water quality that may expand available habitat for existing brook trout populations.

Continued to work with MDE on dam removal guidelines. The guidelines will provide landowners and contractors with information about options, support, and BMPs for the

removal of aging dams. A successful product may lead to the removal of impoundments that act as thermal barriers in watersheds that support coldwater resources.

Freshwater Fisheries - Tidal Bass Program

Staff delivered 5200 juvenile largemouth bass to Wheelabrator Technologies, Inc. for growing until they are 6 - 10 inches, when they will be released to areas of Gunpowder River and Middle River in support of a long-term effort to bolster those fisheries.

Staff delivered supplies to create a release chute for largemouth bass during the Ike Foundation tournament held at Northeast Park. The supplies will be used to support youth organized fishing next year, as well.

Staff aided with the Paralyzed Veterans of America tournament held at Smallwood State Park in partnership with Maryland Bass Nation. Staff provided a trailer and tanks for holding fish during the weigh-in, as well as aerators for live wells prior to fish weighing.

Provided a fish hauling trailer for the PVA bass fishing tournament held at Smallwood State Park for the two-day event. Fish were held in oxygenated water to monitor their recovery and health prior to releasing back to Mattawoman Creek. More than 100 bass were released each day.

Staff attended multiple black bass fishing tournaments on the tidal Potomac River (Charles County). The fishery appears to be doing well and numerous tournaments have reported 5-fish limits in excess of 20 pounds.

Technicians continued work on the tidal Potomac River (Charles, Prince George's Counties) conducting a creel survey of boat- and shore-based anglers at select ramps and fishing locations. The work aims to estimate tag-reporting rates for black bass tagged as part of a cooperative project with the department, Virginia Department of Wildlife Resources, Potomac River Fisheries Commission, and Washington Department of Energy and Environment. The tag-reporting estimate should fine-tune population estimates for the tidal Potomac River black bass fishery.

Fish Health

A total of 40 white perch greater than six inches in length were collected by electrofishing from Piscataway Creek on the tidal Potomac River to support a project investigating liver tumors in white perch. Often, liver tumors can be linked to contaminants and parasites; however, recent work showed tumors in white perch livers that were not caused by either of these factors. Additional fish are being collected to determine the potential cause of the liver tumors.

Freshwater Fisheries - Other

Staff met with the Western Maryland Fishing Guide Association and representatives from the Natural Resources Police to discuss concerns about illegal angling activities along the North Branch of the Potomac River. A positive discussion was had and already resulted in increased enforcement in specific areas that were identified as problematic.